

In the Claims:

1. (CURRENTLY AMENDED) A data storage system comprising:

a first storage system at a customer premises that is configured to receive individual data files from a customer system, and on an individual file-by-file basis substantially in real time from receiving each of the individual data files, to determine individual file types for the individual data files and transfer the individual data files based on the individual file types determined for the individual data files;

a second storage system configured to receive and store the individual data files on the individual file-by-file basis, and to subsequently form blocks of data including the individual data files, and transfer the blocks of data;

a third storage system configured to receive and store the blocks of data to store the individual data files;

a bonded time division multiplex connection configured to transfer the individual data files from the first storage system to the second storage system on the individual file-by-file basis;

a first internet protocol connection configured to transfer the blocks of data from the second storage system to the third storage system; and

a customer management system at the customer premises that is linked to the second and third storage systems by a second internet protocol connection and that is configured to receive first instructions from a customer associated with the customer premises, and in response, to instruct the second and third storage systems to increase data storage capacity for the customer premises and to instruct the second storage system to increase communications capacity for the customer premises on the bonded time division multiplex connection and the third storage system to increase communication capacity for the customer premises on the first internet protocol connection ~~to increase communications capacity for the customer premises.~~

2. (ORIGINAL) The data storage system of claim 1 wherein the customer system is configured to maintain a first version of the individual data files, the second storage system is configured to maintain a second version of the individual data files, and the third storage system is configured to maintain a third version of the individual data files, so that three versions of the individual data files are simultaneously maintained at three geographically diverse locations.
3. (ORIGINAL) The data storage system of claim 1 wherein the second storage system is less than 20 miles from the customer premises.
4. (ORIGINAL) The data storage system of claim 1 wherein the second storage system is less than 50 miles from the customer premises.
5. (ORIGINAL) The data storage system of claim 1 wherein the third storage system is greater than 50 miles from the customer premises.
6. (ORIGINAL) The data storage system of claim 1 wherein the third storage system is greater than 200 miles from the customer premises.
7. (PREVIOUSLY AMENDED) The data storage system of claim 1 wherein in response to the first instructions from the customer, the customer management system is configured to instruct the second and third storage systems to decrease data storage capacity for the customer premises and to instruct the bonded time division multiplex connection and the first internet protocol connection to decrease communications capacity for the customer premises.

8. (PREVIOUSLY AMENDED) The data storage system of claim 1 wherein the customer management system at the customer premises is further configured to receive second instructions from the customer, and in response, to assign priorities to the individual data files and to transfer between the second storage system and the third storage system an individual data file that has an immediate transfer priority.

9. (ORIGINAL) The data storage system of claim 1 wherein the first storage system is a Network Attached Storage (NAS) system and is not a Storage Area Network (SAN) switch.

10. (ORIGINAL) The data storage system of claim 1 wherein the first storage system transfers the individual data files to the second storage system on the individual file-by-file basis and not on a block-by-block basis.

11. (CURRENTLY AMENDED) A method of operating a data storage system, the method comprising:

in a first storage system at a customer premises, receiving individual data files from a customer system, and on an individual file-by-file basis in substantially real time from receiving each of the individual data files, determining individual file types for the individual data files and transferring the individual data files based on the individual file types determined for the individual data files over a bonded time division multiplex connection;

in a second storage system, receiving and storing the individual data files on the individual file-by-file basis, and subsequently forming blocks of data including the individual data files, and transferring the blocks of data over an internet protocol connection;

in a third storage system, receiving and storing the blocks of data to store the individual data files; and

in a customer management system at the customer premises, receiving first instructions from a customer associated with the customer premises and, in response, instructing the second and third storage systems to increase data storage capacity for the customer premises and instructing the second storage systems to increase communications capacity for the customer premises on the bonded time division multiplex connection and the third storage system to increase communication capacity for the customer premises on the first internet protocol connection ~~to increase communications capacity for the customer premises~~, wherein the customer management system is linked to the second and third storage systems by a second internet protocol connection.

12. (ORIGINAL) The method of claim 11 wherein the customer system maintains a first version of the individual data files, wherein storing the individual data files in the second storage system comprises maintaining a second version of the individual data files, and wherein storing the individual data files in the third storage system comprises maintaining a third version of the individual data files, so that three versions of the individual data files are simultaneously maintained at three geographically diverse

locations.

13. (ORIGINAL) The method of claim 11 wherein the second storage system is less than 20 miles from the customer premises.

14. (ORIGINAL) The method of claim 11 wherein the second storage system is less than 50 miles from the customer premises.

15. (ORIGINAL) The method of claim 11 wherein the third storage system is greater than 50 miles from the customer premises.

16. (ORIGINAL) The method of claim 11 wherein the third storage system is greater than 200 miles from the customer premises.

17. (PREVIOUSLY AMENDED) The method of claim 11 wherein the customer management system, in response to the first instructions from the customer, further comprises instructing the second and third storage systems to decrease data storage capacity for the customer premises and instructing the bonded time division multiplex connection and the first internet protocol connection to decrease communications capacity for the customer premises.

18. (PREVIOUSLY AMENDED) The method of claim 11 wherein the customer management system at the customer premises further comprises receiving second instructions from the customer, and in response, assigning priorities to the individual data files and transferring between the second storage system and the third storage system an individual data file that has an immediate transfer priority.

19. (ORIGINAL) The method of claim 11 wherein the first storage system is a Network Attached Storage (NAS) system and is not a Storage Area Network (SAN) switch.

20. (ORIGINAL) The method of claim 11 wherein the first storage system transfers the individual data files to the second storage system on the individual file-by-file basis and not on a block-by-block basis.